

Structural Theory of Social Representations in Light of a Metaphor: of Clouds and Clocks

Dorra BEN ALAYA
Tunis El Manar University, ISSHT

ABSTRACT

The concept of social representation (Moscovici, 1961) as formalized through structural theory initiated by Abric (1976; 1987), is discussed in this paper in light of Popper's metaphorical description (that of clouds and clocks) of phenomena prototypes studied in science, according to their level of regularity and predictability. We evoke Jean-Claude Abric's early work in the understanding of the link between social representations and behavior and specifically about the role of situation representation in determining this link. We also discuss different theoretical proposals from Abric's first work, which has mostly been untapped. These theoretical insights are presented as potential formalizations enabling to merge social representations paradigm with the pole of predictable systems on Popper's metaphorical axis.

Keywords: *Popper, Abric, predictability, structural approach, social representation.*

In a 1976 paper entitled *Of clouds and clocks*, Karl Popper uses a metaphor – that of clouds and clocks – in order to describe two paradigms or prototypes for phenomena which are studied in scientific investigations (be they physical, biological, social or otherwise). What Popper means by clouds are the studied systems that are characterized by high irregularity and disorder. Popper puts this kind of system at the tip of a phenomenon predictability continuum. This is the pole of phenomena that are unpredictable. The opposite pole represents a regular and ordered system prototype, the behavior of which is fairly predictable, just like the reliable and precise clockwork mechanism.

If one applies this metaphor to the field of social representations, as described by Moscovici, they first seem to belong to in the realm of those unpredictable phenomena, as does their connection to behaviors. In his 1961 book *La psychanalyse, son image et son public*, Moscovici dedicated eleven pages to outlining the concept of social representation, which he himself characterized as vague (p.301). On one hand he argues that 'precise statement of its properties' is not easy (p.302) and on the other hand that 'unity of a representation is rarely perfect' (p.304). What Moscovici then enumerates when describing phenomena underlying the concept, serves above all the purpose of distinguishing social representations from any other cognitive systems, since they share so much common features with such concepts as ideology or worldviews for instance. Finally, as a way to define social representation, Moscovici states that it is 'a psychological structure, a specific way of knowing' (p.302). He also specifies that their content is 'mainly illustrative' and 'structured by a given meaning' (p.303). Besides the concept's inaccuracy, unpredictability of those phenomena he designated is among other things owed to the fact that, for instance, social representations emerge in 'very large environments' (p.310), to the extent that a diversity of social representations' functions can be observed in a given society: 'the fact that a representation offers only a categorization system among a group and provides behavioral rules among others is a consequence of that group's position within society' (p.310). Moscovici adds that a social representation 'reflects the state of its producing community' (p.310), which makes it a phenomenon that Heisenberg (1942/1998) would define as a non-completely 'objectifiable' level of reality, dependent upon epistemic categories of the interested researcher.

At the risk of being too mechanistic, the source of a novel way to look at social representations' structural approach through Popper's metaphor was the following idea: systems

that fit Popper's 'clouds' metaphor behave like wholes that can be observed in different social systems (but also in physical or biological ones). As a figure, Popper uses the case of a mosquito swarm in which every individual is cohesively maintained with the rest of the cloud by a sort of attraction generated by the thicker part of it. But, from the metaphorical point of view, this assembled whole is not something structured. In no way do we suggest that social representations theory initially describes a completely random cloud-like phenomenon (rather, one can figure the opposite by referring to objectivation process' specific description), but we could argue that some of social representations' internal mechanics still need further formalizing.

Jean-Claude Abric's skill for bringing together opposite sides, such as research laboratory's rigor and an interest in social life, or gambling and strategy, allowed for (if one still dares using Popper's metaphor) conceptualizing a certain 'cloud's clockwork mechanism' by building the foundations of what was to become the 'Aix School' of social representations. In doing so, he first allowed for better assessment of the link between social representations and behavior. By the way, this was the first problem involving social representations he tried to solve with his colleagues in 1967. The work's underlying assumption was the idea of individual behavior's determination, through their representation of situation. In his original work, Jean-Claude Abric's answer was simple and efficient: 'it is the representation of situation and not the situation itself that guides behavior' (1989, p.79).

In order to provide evidence for his idea, he used in his original work (1976; 1987) experimental games situations. He was thereby able to demonstrate the importance of some elements of a situation's representations – that of oneself, of others, of task and of context – in determining behavior. In 1976, following Moscovici and Faucheux's (1968) work, Jean Claude Abric manipulated the 'representation of partner' variable. We must note that Moscovici and Faucheux had already acknowledged an effect of representation of partner on cognitive control of the situation by players and on the strategy they mobilized. Incidentally, Jean-Claude Abric had previously published a first study on that topic, in collaboration with Faucheux, Moscovici and Plon, in 1967. He had also confirmed and defined (as had already demonstrated Moscovici and Faucheux in 1968, and Baumeister in 1982) the way representation of oneself determines behavior.

Jean Claude Abric considered this determination by elements of the gaming situation to be extendable to a range of real situations. And he made explicit the greater predictability his

work brought, through analysis of gaming situations, by stating that 'the first step of interaction is not constituted by real trade between partners, it precedes it: it is that of symbolic relationship (...) that of representation (Abric, 1987, p. 13). Even before an interaction has started it is predetermined by each partner's representation of each other.

Jean-Claude Abric tapped many previously conducted works in social psychology, mostly experimental, regarding the description of phenomena underlying the notion of social representation. Of course, ontologically, the notion of 'core nucleus' in structural theory was rooted in Moscovici's 'illustrative model' or 'imaging nucleus' (1961). But, by tapping into research of the cognitivists which showed that some contextual elements played a key part in determining subjects' worldviews, Jean-Claude Abric was able to give this 'nucleus' greater accuracy.

Among the classic works in social psychology that inspired his formulation of core nucleus theory can be found Heider's (1927) notion of 'uniting nuclei' to which people assign events. To them, these nuclei constitute 'centers of the world's causal texture' (Deutsch and Krauss, 1972, p. 33, quoted by Abric, 1976, p. 117) or 'the environment's causal core' (Heider, 1958, quoted by Abric, 1976, p. 117). Jean-Claude Abric also wondered what could lead an element to become a part of core nucleus. In order to answer that question, he referred to Sherif and Sherif (1965, quoted by Abric, 1976, p. 118), to whom the most acceptable element from a normative and epistemic point of view becomes central in the way one thinks about a given situation. He also referred to Chombart de Lauwe and colleagues (1963), who talked about a 'static nucleus', made of stereotypes with high affective values (Abric, 1976, p. 118). And, without yet talking about a peripheral system, he had put the weight of a representation's elements into perspective by referring to Codol (1972), who demonstrated the global representation of a situation to be subdivided into representations of that situation's elements.

But whenever Jean-Claude Abric talked about the origins of the idea of a nucleus that structured social representations, he always made explicit reference to a crucial experiment from Asch (1946). As a reminder, this experiment demonstrated that changes in a single trait from a list describing a person could yield very different global impressions about that person being judged. In these changes, some traits (those related to sociality) play a key part in impression formation while 'peripheral' others, play a minor part.

In order to sum up his originating idea, Jean-Claude Abric specified two processes taking place within a representation; on one hand a weighting process defining the importance of each element and on the other hand a regulating process operating by sorting or transforming and allowing for the representation to maintain itself in a dynamic environment.

But if we prefer talking about the structural approach or the 'Aix school' of social representations rather than core nucleus theory in this paper, it is because we realized, when rereading parts of Jean Claude Abric's PhD thesis (1976), that there are a number of points he never mentioned and were never tapped into that hold the potential for further advancing theory. To us, the Aix School of social representations seems more than core nucleus theory. This is the reason why stating or reminding some of those points seemed so important to us, as they constitute as many parts to be added to the 'clockwork mechanisms of clouds'. In his first study Jean-Claude Abric (1976) argued the individual to be one of the elements of the situation taking part in his reconstruction of reality (hence the consideration for representation of oneself in the understanding of behavior). Among the formulated principles, one can find the following ideas:

- A representation preferentially impacts less complex behaviors, which are characterized as 'primitive'. For instance, in a mixed motivation gaming situation (of the prisoner's dilemma kind) one such primitive behavior could be a defensive one. With regards to more complex behavior such as cooperation (in a mixed motivation gaming situation) on the other hand, representation still plays a key part but this time along with other information taken from reality (1976, p.217).
- A representation, in his own words, firstly reflects a relation with the object (1987, p.64). This idea was further developed with that of 'distance from the object'.
- A social representation is a worldview but also a system of expectations and anticipation. Representation, as he said, 'prepares for the future' (Abric 1987, p.12), hence the potential for predictability he puts in phenomena underlying this concept.
- There is a fit between the situation one is facing and one's representation of it: 'the clearer and more unambiguous a situation, the more it will determine a simple, differentiated representation which is organized by easily accessible rules of *coreness* (...). On the other hand, the more ambiguous to subjects a situation, the 'narrower' the representation

of it meaning its constitutive elements will be less differentiated and the links between them more complex.' (Abric, 1986, p.213).

- Under some circumstances, it is the representation of oneself that becomes determining: 'In the absence of any objective and external reference, representation of oneself will play a key part in the making of situation representation' (p.215)
- In a given situation 'the most problematic of elements (partner, task) to subjects' functioning will be likely to play a key part (...) thereby a representation becomes cognitively determined and subjected to inter individual fluctuation (...). In other situations, the element most related to subject's or group's system of norms can hold this central position, and in this case representation becomes socially determined, and varies according to individual's reference or affiliation groups (...) ' (p. 215).

Finally, starting from his founding work (1976; 1986) Jean-Claude Abric began what was to give more and more accuracy to this 'clockwork mechanism', with the structural approach to social representations. He wrote in 1986 (p.218) that, among pending issues at that time, was one of the theoretical kind '(...) which regards the genesis, evolution and processes of transformation of social representations on one hand, and the internal structure of representations on the other'. He also foresaw methodological issues to come (1987, p. 218): 'methods for collecting representations, internal structure analysis and, for instance, core nucleus identification techniques are still primitive, fractional and scarcely corroborated with undisputable evidence'. Jean-Claude Abric already recommended diversification of methodological approaches, be they qualitative or quantitative, ranging from projective techniques to experimentation, in order to study social representations. And it is in line with those guidelines that structural approach to social representations grew during the following decades, up to now.

REFERENCES

Abric, J.-C. (1976). *Jeux, conflits et représentations sociales*. Thèse de Doctorat d'Etat, Université de Provence: Aix-en-Provence.

- Abric, J.-C. (1987). *Coopération, compétition et représentations sociales*. Cousset: DelVal.
- Abric, J.-C., Faucheux, C., Moscovici, S., & Plon, M. (1967). Rôle de l'image du partenaire sur la coopération en situation de jeu. *Psychologie Française*, 12(4), 267-275.
- Asch, S.E. (1946). Forming impressions of personality. *Journal of Abnormal and Social Psychology*, 41, 258-290.
- Baumeister, R.-F. (1982). Self esteem, self presentation and future interaction : A dilemma of reputation. *Journal of Personality*, 50(1), 29-45.
- Chombart de Lauwe, M.-J., Chombart de Lauwe, P.-H., Huguet, M., Perroy, E., & Bisseret, N. (1963). *La femme dans la société. Son image, dans différents milieux sociaux*. Paris: Editions du CNRS.
- Codol, J.-P. (1972). *Représentations et comportements dans les groupes restreints*. Thèse de 3^{ème} cycle, Université de Provence: Aix-en-Provence.
- Deutsch, M., & Krauss, R.M. (1972). *Les théories en psychologie sociale*. Paris, La Haye: Mouton.
- Faucheux, C., & Moscovici, S. (1968). Self-esteem and exploitative behavior in a game against chance and nature. *Journal of Personality and Social Psychology*, 8(1), 83-88.
- Heider, F. (1927). Ding und Medium. *Symposium*, 1, 109-158.
- Heider, F. (1958). Consciensness, the perceptual world and communication with others. In R. Taguiri, L., Petrullo (Eds.), *Person perception and interpersonal behavior* (pp. 27-32). Stanford: Stanford University Press.
- Heisenberg, W. (1998). *Philosophie – Le manuscrit de 1942*, Paris: Seuil.
- Moscovici, S. (1961). *La psychanalyse, son image et son public*. Paris: Presses Universitaires de France.
- Popper, K. (1979). Of Clouds and Clocks. An approach to the problem of rationality and the freedom of man. In K. Popper (Ed.), *Objective knowledge: an evolutionary approach* (pp. 206-231). New York: Clarendon Press.
- Sherif, M., Sherif, C.W. (1965). Research on intergroup relations. In O. Klineberg, R. Christie (Eds.), *Perspectives in social psychology* (pp. 153-177). New-York: Holt, Rinehart & Winston.

BIOGRAPHIE:

DORRA BEN ALAYA is assistant professor (*maître de conférences*) in social psychology at the Higher Institute of Human Sciences of Tunis (Tunis El-Manar University). Her research deals with social thinking in general and social representations in particular. Her publications regards several themes that correspond to research objects that are subject to change dynamics in the transitional Tunisian context, such as re-appropriation of history through virtual social networks, “good marital partner”, gender, language and their symbolic relations, and homosexuality. She is currently interested in forms of social representations expression and making in virtual social networks, in a “post-revolutionary” Tunisian context. Another aspect of her field of interest is its broader fit into epistemological issues about social representation objects as epistemic constructs.